



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

| APPLICATION NO.  | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO.         | CONFIRMATION NO. |
|--|-------------|----------------------|-----------------------------|------------------|
| 10/612,769   | 07/01/2003  | Christopher Che      | 021756-017600US             | 4994             |
| 51206 7590 03/09/2007<br>TOWNSEND AND TOWNSEND AND CREW LLP<br>TWO EMBARCADERO CENTER<br>8TH FLOOR<br>SAN FRANCISCO, CA 94111-3834 |             |                      | EXAMINER<br>MYINT, DENNIS Y |                  |
|  |             |                      | ART UNIT<br>2162            | PAPER NUMBER     |
| SHORTENED STATUTORY PERIOD OF RESPONSE   | MAIL DATE   | DELIVERY MODE        |                             |                  |
| 3 MONTHS   | 03/09/2007  | PAPER                |                             |                  |

**Please find below and/or attached an Office communication concerning this application or proceeding.**

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

|                              |                                      |                                   |  |
|------------------------------|--------------------------------------|-----------------------------------|--|
| <b>Office Action Summary</b> | <b>Application No.</b><br>10/612,769 | <b>Applicant(s)</b><br>CHE ET AL. |  |
|                              | <b>Examiner</b><br>Dennis Myint      | <b>Art Unit</b><br>2162           |  |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 16 January 2007.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-6, 13, 14 and 16-19 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-6, 13-14, and 16-19 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 01 July 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

### **DETAILED ACTION**

1. This communication is responsive to Applicant's Amendment, filed on January 16, 2007.
2. Claims 1-6, 13-14, and 16-19 are pending in this application. Claims 1 and 13 are independent claims. In the Amendment filed on January 16, 2007, Claims 1 was amended. This office action is made final.

### ***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of

Art Unit: 2162

35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

5. Claims 1, 3, 5, 13-14, and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Barrick Jr. et al. (hereinafter "Barrick") (U.S. Patent Number 6625647) in view of Chen et al. (hereinafter "Chen") (U.S. Patent Number 5793976) and further in view of Dutta et al., (hereinafter "Dutta") (U.S. Patent Application Publication Number 2002/0161794).

Referring to claim 1, Barrick Jr. et al. is directed to a system and method for assembling timing data in a multi-layer server environment, comprising:

"generating a first HTML request" (Barrick, Column 4, Line 41-65);

"depositing a time of generation of the first HTML based request in one or more hidden data fields associated with the first HTML based request" (Barrick, Column 9 Line 1-10 *Delta Field*, Figure 5: *Delta Field 502*, and Column 7, Line 43 through Column 8 Line 20);

"forwarding the HTML based request to one or more servers" (Barrick, Column 7 Lines 15-22);

"generating an HTML based response" (Barrick, Column 7 Lines 56-66);

"transferring" and "forwarding" (Barrick, Column 7 Lines 56-66)

"receiving the HTML based response to a browser for displaying the HTML based response, the browser operable to store a time of arrival" (Barrick, Column 8 Lines 33-38, i.e., *By controlling the sending of the HTTP GET request for the desired HTML, page, the browser agent is able to record the time the*

Art Unit: 2162

*request was send and monitor the receiving of the page to determine the download time);*

Barrick Jr. et al. teaches that the response is sent back from the server to the browser agent, located at the client machine, which calculates the round-trip time based on the request time and arrival time at the browser (Barrick Jr. et al., Column 7 56-66).

Barrick Jr. et al. does not explicitly disclose the limitations:

““the arrival times”, “departure time”, and “transferring the arrival times, the time of generation of the HTML based request, and the departure times to the one or more hidden data fields associated with the HTML based response”; and “a time of display for the HTML based response”.

Chen teaches the limitations:

“the arrival times”, and “departure time” (Chen, Figure 2 and Column 7 Line 50 through Column 8 Line 54), and “transferring the arrival times, the time of generation of the (HTML based) request, and the departure times to the one or more hidden data fields associated with the (HTML based) response” (Chen, Column 6 Line 55 through Column 7 Line 5; and Column 8 Line Column 9 Line 14, i.e., *A particular advantage of the node-by-node delay measurement packet is that it allows the computation and relay of instantaneous delay information..... Alternatively, additional time stamps can be sued for each node, allowing the switch to merely record in one timestamp field the time that the packet arrives, and then record the time the packet leaves into another timestamp field*);

Art Unit: 2162

Chen teaches a method and system for monitoring of network performance, wherein a special class of packet called *management packet* (Chen, Column 6 Line 55-60) is defined which includes an information field which is modified by all the nodes along a virtual connection (Chen Column 6 Line 55 through Column 7 Line 5; and Column 8 Line Column 9 Line 14, i.e., *A particular advantage of the node-by-node delay measurement packet is that it allows the computation and relay of instantaneous delay information..... Alternatively, additional time stamps can be used for each node, allowing the switch to merely record in one timestamp field the time that the packet arrives, and then record the time the packet leaves into another timestamp field*). Said management packets are used to collect performance parameters along any virtual connection, including packet delays at each intermediate node where arrival time and departure time at each node are recorded in multiple timestamp fields in the packet, which is used to calculate delay time at each and recorded into the packet (Chen et al., Figure 2 and Column 7 Line 50 through Column 8 Line 54).

Dutta teaches the limitation: "a time of display for the HTML based response" (Paragraph 0047, i.e., *the browser maintains a list of all the screen image that have been captured within a configurable duration of time, and the time that the screen image was captured*).

At the time the invention was made, it would have been obvious to a person of ordinary skill in the art to add the feature of acquiring arrival and depart time at each node (servers or switches or routers), as taught by Chen, and the feature of storing a time of display, as taught by Dutta, to the system and method

Art Unit: 2162

taught by Barrick et al. so that the combined method of Barrick in view of Chen teaches the limitations:

“generating a first HTML based request” (Barrick, Column 4, Line 41-65);

“depositing a time of generation of the first HTML based request in one or more hidden data fields associated with the first HTML request” (Barrick, Column 7 Lines 56-66);

“forwarding the first HTML based request to one more servers that each deposit an arrival time and a departure time for the first HTML based request in the one or more hidden data fields associated with the first HTML based request” (Barrick, Column 7 Lines 15-22; and Chen, Column 6 Line 55 through Column 7 Line 5; and Column 8 Line Column 9 Line 14);

“generating an HTML based response in response to receiving the first HTML based request” (Barrick, Column 7 Lines 56-66);

“depositing a time of generation of the HTML based response in one or more hidden data fields associated with the HTML based response” (Barrick, Column 7 Lines 56-66; Chen, Column 8 Line Column 9 Line 14; Note that in the chain of nodes in the method of Chen, a node’s response becomes a request to next node in the chain; See Figures 3, 4, and 5);

“transferring the arrival times, the time of generation of the HTML based request, and the departure times to the one or more hidden data fields associated with the HTML based response” (Barrick, Column 9 Line 1-10 *Delta Field*, Figure 5: *Delta Field 502*, and Column 7, Line 43 through Column 8 Line 20; and Chen, Column 8 Line Column 9 Line 14, i.e., *A particular advantage of*

Art Unit: 2162

*the node-by-node delay measurement packet is that it allows the computation and relay of instantaneous delay information..... Alternatively, additional time stamps can be sued for each node, allowing the switch to merely record in one timestamp field the time that the packet arrives, and then record the time the packet leaves into another timestamp field; Note that, in Chen's method, arrival times and departure times are recorded into multiple timestamp fields at each node, thus transferring/storing the arrival times, the times of generation of the request, and the departure times. At the beginning of this chain, time of generation is recorded. After that, time of arrival and departure are recorded all the way along the chain);*

*"forwarding the HTML based response to one or more servers each deposit an arrival time and a departure time in the one more hidden data fields associated with HTMO based response" (Barrick, Column 9 Line 1-10 Delta Field, Figure 5: Delta Field 502, and Column 7, Line 43 through Column 8 Line 20; and Chen, Column 8 Line Column 9 Line 14,);*

*"receiving the HTML based response to a browser for displaying the HTML based response, the browser operable to store a time of arrival and a time of display for the HTML based response" (Barrick, Column 8 Lines 33-38, i.e., By controlling the sending of the HTTP GET request for the desired HTML, page, the browser agent is able to record the time the request was send and monitor the receiving of the page to determine the download time; and Dutta Paragraph 0047, i.e., the browser maintains a list of all the screen image that have been*



Art Unit: 2162

*captured within a configurable duration of time, and the time that the screen image was captured);*

“generating a second HTML based request, the second based request including the times of generation, arrival times, departure times, and time of display for the first HTML based request and HTML based response in one or more hidden data fields associated with the second HTML based request” (Barrick, Column 4, Line 41-65; Barrick, Column 9 Line 1-10 *Delta Field*, Figure 5: *Delta Field 502*, and Column 7, Line 43 through Column 8 Line 20; and Chen, Column 8 Line Column 9 Line 14; Note that the method of Barrick in view of Chen can repeat the whole process and generate a second HTML based request OR, on the way a long the chain of nodes, more and more HTML-based requests can be generated which would included times of generation, arrival times, departure times, and time of display for the previously generated HTML request (i.e., first HTML based request). Running software processes repeatedly in a loop is notoriously well known in the art).

One would have been motivated to do so in order that *the information field of a management cell is modified by all the network nodes along a virtual connection, not just by the virtual end point*” (Chen et al., Column 6 Line 65 through Column 7 Line 5) and also because recording the time of display, duration of execution/delay, time of generation, time of arrival, and time of departure are well known in the art of network performance measuring as well as in the art of web-based advertisement.

Art Unit: 2162

Referring to claim 3, Barrick teaches the limitation:

“storing the times of generation, arrival times, departure times, and time of display in the hidden data fields in the HTML based response in a database” (Barrick, Column 5 Line 1-10 and Column 10 Line 52-58; Barrick teaches the storing of the arrival times and departure times in the hidden data fields in the second HTML based response in a database (Barrick Column 4 Line 66 through Column 5 Line 12, i.e., *database server 112*; Barrick, Column 5 Line 1-10 and Column 10 Line 52-58); and Barrick, Column 4, Line 41-65; Barrick, Column 9 Line 1-10 *Delta Field*, Figure 5: *Delta Field 502*, and Column 7, Line 43 through Column 8 Line 20; and Chen, Column 8 Line Column 9 Line 14; Note that the method of Barrick in view of Chen can repeat the whole process and generate a second HTML based request OR, on the way a long the chain of nodes, more and more HTML-based requests can be generated which would included times of generation, arrival times, departure times, and time of display for the previously generated HTML request (i.e., first HTML based request). Running software processes repeatedly in a loop is notoriously well known in the art; and Dutta, Paragraph 0047, i.e., *the browser maintains a list of all the screen image that have been captured within a configurable duration of time, and the time that the screen image was captured*).

Referring to claim 5, Chen teaches the limitation:

Art Unit: 2162

“at least one of the arrival time and the departure time is based on a local time associated with one or more servers” (Chen, Column 7 Line 17-27, i.e., *local measurement of packet delay*).

Referring to claim 18, Barrick is directed to the limitation:

“at least one first server is a web server” (Column 4 Line 58-60 , i.e., *web server 104*, and Figure 1C: *web server 104* ).

Claim 13 is rejected on the same basis as claim 1.

Claim 14 is rejected on the same basis as claim 3.

6. Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over Barrick in view of Chen and further in view of Dutta and further in view of Fish et al. (hereinafter “Fish”) (U.S. Patent Application Publication Number 2004/0111394).

Referring to claim 2, Barrick in view of Chen does not explicitly disclose the limitation:

“displaying the one or more hidden data fields to a user”.

Fish teaches the limitation:

“displaying the one or more hidden data fields to a user” (Paragraph 0023, 034, and 0038-0039). Fish teaches a method for writing debug data into hidden

Art Unit: 2162

fields of HTML or XML document, which hidden until the user makes said hidden fields visible to be displayed (Paragraph 0023, 034, and 0038-0039).

At the time the invention was made, it would have been obvious to a person of ordinary skill in the art to add the feature of displaying hidden data fields as taught by Fish et al. to the system and method taught by Barrick Jr. et al. in view of Chen et al. as applied to claim 1 above so that, the method of claim 1 would further comprise displaying the one or more hidden data fields to a user. One would have been motivated to do so in order to simply allow the user analyze the hidden data instantly rather than storing the hidden data in a database.

7. Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Barrick in view of Chen and further in view of Dutta and further in view of Packman et al., (hereinafter "Packman") (U.S. Patent Application Publication Number 2003/0225877).

As per claim 4, Barrick in view of Chen and further in view of Dutta teaches the limitations: "performing analysis on the times of generation, arrival times, departure times, and time of display in the database to determine a time of delay at each server and at the browser for the first HTML based request and the HTML based response" (Barrick, Column 10 Lines 55-61; Barrick, Column 5 Line 1-10 and Column 10 Line 52-58; Barrick, Column 4, Line 41-65; Barrick, Column 9 Line 1-10 *Delta Field*, Figure 5: *Delta Field* 502, and Column 7, Line 43 through

Art Unit: 2162

Column 8 Line 20; Chen, Column 8 Line Column 9 Line 14; and Dutta, Paragraph 0047).

Barrick in view of Chen and further in view of Dutta does not explicitly teach the limitation: "the one or more servers including at least one application server and a database server".

Packman teaches the limitation:

"the one or more servers including at least one application server and a database server"(Paragraph 0032, i.e., *application servers 340 and/or database servers*).

At the time the invention was made, it would have been obvious to a person of ordinary skill in the art to add the feature of measuring performance of application servers and/or database servers, as taught by Packman, to the method and system of Barrick in view of Chen and further of Dutta so that the resultant method would comprise one or more servers which are application servers and database servers. One would have been motivated to do so because measuring performance of application servers and database servers are notoriously well known in the art (Packman Paragraphs 0004-0005).

8. Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Barrick in view of Chen and further in view of Engel (hereinafter "Engel") (U.S. Patent Application Publication Number 2004/0246996).

Art Unit: 2162

Referring to claim 6, Barrick in view of Chen does not explicitly recite the limitation:

“wherein the local time of at least one of the one or more servers is synchronized with at least one other of the one or more servers”.

Engel teaches the limitation:

“wherein the local time of at least one of the one or more servers is synchronized with at least one other of the one or more servers” (Paragraph 0017). Engel teaches a method for time synchronization across communication devices wherein local time of one or more nodes is synchronized by exchanging timing packets (Engel Paragraph 0017).

At the time the invention was made, it would have been obvious to a person of ordinary skill in the art to add the feature of synchronizing local time among nodes as taught by Engel to the system and method taught by Barrick Jr. et al. in view of Chen et al. as applied to claim 5 so that, in the resultant system and method, local time of at least one of the one or more servers will be synchronized with at least one other of the one or more servers. One would have been motivated to do so in order to determine delay time between nodes (Engel Paragraph 0003).

Claim 29 is rejected on the same basis as claim 6.

Art Unit: 2162

9. Claim 19 is rejected under 35 U.S.C. 103(a) as being unpatentable over Barrick in view of Chen and further in view of Blythe et al. (hereinafter "Blythe") (U.S. Patent Application Publication Number 2004/0139433).

Referring to claim 19, Barrick in view of Chen does not explicitly teach the limitation:

"at least one second server is an application server".

Blythe teaches the limitation:

"at least one second server is an application server" (Paragraph 0036 and 0054). Blythe et al. teaches the use of application servers in distributed environment (Blythe et al., Paragraph 0036 and 0054).

At the time the invention was made, it would have been obvious to a person of ordinary skill in the art to add the use of application servers to the method and system of Barrick Jr. et al. in view of Chen et al. as applied to claim 13 so that said system and method would comprise at least one second server which is an application server. One would have been motivated to do so in order to simply measure performance metrics of such servers.

10. Claims 16 and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Barrick in view of Chen and further in view of Dutta and further in view of Struble (U.S. Patent Application Publication Number 2003/0004796).

Art Unit: 2162

As per claim 16, Barrick in view of Chan and further in view of Dutta as applied to claim 1 does not explicitly teach the limitation: "further comprising an internal clock associated with the at least one first server for keeping local time".

However, Struble teaches the limitation "further comprising an internal clock associated with the at least one first server for keeping local time" (Paragraph 0023, i.e., *The internal clock 216 is configured to maintain current local time*).

At the time the invention was made, it would have been obvious to a person of ordinary skill in the art to add the feature of using an internal clock to keep local time, as taught by Struble, to the method and system of Barrick in view of Chan and further in view of Dutta so that the resultant method would comprise an internal clock which is associated with at least one server for keeping local time. One would have been motivated to do so in order to have two computers work *relative to current conditions and relative to the current time* (Struble, Paragraph 0023).



***Response to Arguments***

11. Applicant's arguments filed on January 16, 2007 have been considered but are not persuasive.

Referring to claim 1, Applicant argued that *Although the browser agent of Barrick records the time of send of the HTTP GET request, there is no mention that the browser agent records the time of sending the HTTP GET request within the HTTP GET request.* In response, it is pointed out that said limitation (the time of sending the HTTP GET request) is recited in the claim. In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., the time of sending the HTTP GET request) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

Applicant additionally argued that *Accordingly, Barrick dose not teach or suggest depositing a time of generation of the first HTML based request in one or more hidden data fields associated with the first HTML based request, as claimed by Applicants.* This argument is inappropriate and invalid. Independent claims of the instant application are rejected under 35 U.S.C. § 103 citing the combination of Barrick, Chen, and Dutta. As such, Barrick teaches depositing time-related data in the delta field, Chen teaches arrival times, departure times,

Art Unit: 2162

and transferring arrival times, the times of generation of the request and the departure times to one more hidden data fields associated with the response, and Dutta teaches a time of display of the HTML based response. As such, Barrick, Chen and Dutta a combination teaches all the limitations of the independent claims of the instant application.

Therefore, rejections of independent claims 1 and 13 and their respective dependent claims stand firm.

***Conclusion***

12. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

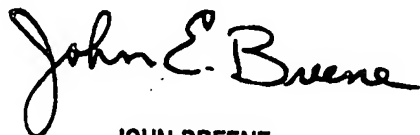
Art Unit: 2162

***Contact Information***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dennis Myint whose telephone number is (571) 272-5629. The examiner can normally be reached on 8:30AM-5:30PM Monday-Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Breene can be reached on (571) 272-4107. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



JOHN BREENE  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 2100

Dennis Myint  
Examiner  
AU-2162